Field Notes

In an effort to share some of the natural history observations made during the sea scallop survey, we have requested that the Chief Scientists on each part of the cruise comment on some of the more interesting catches that were brought aboard the R/V ALBATROSS IV.

New Technology

Scallops were measured using electronic measuring boards for the first time this year. Lengths were input directly into the Fisheries Scientific Computer System to the nearest millimeter. This proved to be more efficient than the old method, which required manually entering each five-millimeter size grouping's tally into the database at the completion of each station.

Recruitment

Catches of scallops in the Hudson Canyon Restricted area were noticeably lighter this year. Just south, tows in the Elephant Trunk area appeared to have larger catches than observed the last few years.

Something Interesting

Leg II of the annual standard sea scallop survey was characterized by perfect weather and strong and efficient crew. We managed to make our way into Canadian waters for the second straight season. Also, we reoccupied stations in the three closed areas from last year and observed significant growth. Unfortunately, the only real strong recruitment of scallops north of Southern New England occurred on the Canadian side of Georges Bank.

Rock Chains

We conducted three more comparison tows for the rock chain calibration experiment. The new rock excluding design was used as the standard gear in the Great South Channel strata.

Young-of Year Atlantic Cod and Haddock

Throughout the survey area, a surprising number of small (1-4 inch) cod and haddock were found mostly concentrated in the mid-Atlantic and Southern New England area. As compared to the 2003 scallop survey when 620 small cod were taken, the 2004 scallop survey caught only 5 young-of-year whereas this year over 350 were captured. The largest catches of these small cod were found at stations 78, 133, 152, 179, 478 and 499.

A dramatic increase in young haddock was also observed. In 2003, just under 700 small haddock were taken; in 2004, 120 small haddock were picked up and this year over 2,800 were identified. The largest haddock catches were found at stations 127, 159, 187, 214, 215 and 474. All of these stations were located south, east and north and outside of the mid-Atlantic closed area. Even though there were many more haddock taken this year they probably will not survive because they are distributed to the south of their optimal habitat. The number of young haddock on Georges this year was higher than 2004, but still well below the record 2003 year class. Catches of age 0+ are not used as an input in the stock assessment. However, age 0+ catches can provide indications of large recruitment events.

Fouled Scallop Shells

In the central and western part of the Nantucket Lightship (NLS) closed area as well as in the northern tip of Closed Area II, many large scallops (greater than 5 inches) were found with a variety of fouling organisms on them. Colonizing bryozoans (moss animals that look like orange or red scum growing on top of the scallops), hydroids, sea feathers, barnacles, anemones, horse mussels and sponges that were sometimes two to three times the size of the scallop itself were found growing on the shells. By-catch in the form of fish and substrate in the NLS area was also minimal (5 bushels) as opposed to 15 bushels in the northern tip of Closed Area I.

Paralytic Shellfish Poison Samples

Samples of shellfish were collected in waters from Georges Bank to east of Long Island in response to the 2005 summer red tide outbreak to assist other federal, state, and academic institutions in determining the extent of the bloom of *Alexandrium fundyense*, the organism responsible for paralytic shellfish poisoning (PSP). At five predetermined locations, a Rocking Chair dredge was deployed to collect the samples. In total, the dredge was set twenty-five times; 23 ocean quahogs and 28 scallops were captured. The Rocking Chair dredge is a non-hydraulic dredge with metal tines that sieve the sediment, but retain the shellfish.